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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,283	09/12/2003	Scott C. Blanchet	B429-073	7622
26278	7590	01/31/2006	EXAMINER	
COWAN LIEBOWITZ & LATMAN, P.C			HODGE, ROBERT W	
JOHN J TORRENTE			ART UNIT	
1133 AVENUE OF THE AMERICAS			PAPER NUMBER	
NEW YORK, NY 10036			1746	

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/661,283	Applicant(s) BLANCHET ET AL.	
	Examiner Robert Hodge	Art Unit 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,6-37 and 40-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,6-37 and 40-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. Applicant's arguments, see Remarks/Arguments, filed 1/11/06, with respect to the rejection(s) of claim(s) 1, 3, 6-18, and 22-36 under 35 USC 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Pre-Grant Publication No. 2001/0040349.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pre-Grant Publication No. 2001/0040349 hereinafter Carr.
5. Carr teaches a connection assembly for connecting two components that utilizes a dielectric member situated between two members of the two components, that is disk shaped and has an opening that is smaller than the opening of the two members and an outer portion that extends outward of the two members and utilizes a raised sealing face (abstract, figures 1 and 5, paragraphs [0002] – [0045]).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 9-18, 20 and 22-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carr in view of U.S. Patent No. 6,070,911 hereinafter Namikawa.

8. Carr teaches everything in the above 102 rejection as well as that the connection assembly can be used for metal pipes and be joined with bolts.

9. Carr does not teach any of the specific properties of the connection assembly.

10. Namikawa teaches a connection assembly for connecting two pipes that are at different electrical potentials by using dielectric materials sandwiched in between two plates or flanges that are weldable, using bolts and or substantially v-shaped clamps to hold the two members together, using dielectric members that have smaller openings than that of the bolt holes, and that dielectric tubes are used around the bolts, and that said bolts also have nuts and washers used in the assembly that also comprise metal, dielectric washers (i.e. a disk-shaped dielectric member) and non-dielectric washers.

Namikawa also teaches that any and all of the parts used in the assembly may be coated with a dielectric material that is of a mica material and/or a ceramic coating (abstract, figures 1-5, column 1 lines 6-54 and column 2 line 11 – column 4, line 59).

11. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the features of the Namikawa reference in the Carr reference in

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order to provide a connection assembly that decreases flow resistance and is also electrically isolated that would in turn prevent any explosions should explosive gases be transported in the pipes.

12. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carr in view of Namikawa as applied to claims 3, 9-18, 20 and 22-36 and further in view of U.S. Patent No. 5,967,566 hereinafter Schlicht.

13. Carr and Namikawa do not teach the use of an ASME slip-on flange.

14. Schlicht teaches a lightweight slip on pipe flange that is a conventional ASME flange (column 1, lines 52-63 and column 3, lines 51-64).

15. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include a conventional ASME flange in the Carr and Namikawa references as taught by Schlicht in order to use a well known and recognized slip-on flange that is easily attainable and would allow for easy assembly of the connector.

16. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carr in view of Namikawa as applied to claims 3, 9-18, 20 and 22-36 and further in view of U.S. Pre-grant publication No. 2004/0137259 hereinafter Pabla.

17. Carr and Namikawa do not teach the use of NiCrAlY and Al_2O_3 as the dielectric materials to be used in the coatings.

18. Pabla teaches that NiCrAlY and Al_2O_3 are well known for their dielectric properties and are especially desirable in dielectric coatings (paragraphs [0008], [0014], [0022], [0033], and tables III and IV).

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19. At the time of the invention it would have been obvious to a person of ordinary skill in the art to use NiCrAlY and Al_2O_3 as the dielectric materials in the Namikawa and Carr references as taught by Pabla in order to use well known dielectric materials that would provide an electrically insulative coating that would be durable and easily attainable for manufacturing purposes.

20. Claims 37, 40-51, 53, 55-56 and 58-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carr in view of Namikawa as applied to claims 3, 9-18, 20 and 22-36 and further in view of Energy Partners.

21. Carr and Namikawa do not teach the use of the connection assembly with a fuel cell stack.

22. As discussed in a prior office action Energy Partners released an article on June 11, 1999 disclosing a 20 kW fuel cell stack called the NG2000. Further research reveals a picture of the NG2000 that has connectors mounted to it that use an industry standard butt weld sanitary ferrule connectors that are commercially available. As can be seen in the picture it is clearly a fuel cell stack assembly having more than one sanitary ferrule connector.

23. At the time of the invention it would have been obvious to a person of ordinary skill in the art that the connection assembly taught by Carr and Namikawa could also be use in the Energy Partners fuel cell stack in order to electrically isolate the stack from the fuel source especially at high operating pressures in order to reduce the risk of a potential explosion due to the extreme combustibility of gases used in fuel cell stacks.

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24. Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carr in view of Namikawa and Energy Partners as applied to claims 3, 9-18, 20, 22-37, 40-51, 53, 55-56 and 58-60 and further in view of Schlicht.

25. Carr, Namikawa and Energy Partner do not teach the use of an ASME slip-on flange.

26. Schlicht teaches a lightweight slip on pipe flange that is a conventional ASME flange (column 1, lines 52-63 and column 3, lines 51-64).

27. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include a conventional ASME flange in the Carr and Namikawa references as taught by Schlicht in order to use a well known and recognized slip-on flange that is easily attainable and would allow for easy assembly of the connector.

28. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carr in view of Namikawa and Energy Partners as applied to claims 3, 9-18, 20, 22-37, 40-51, 53, 55-56 and 58-60 and further in view of Pabla.

29. Carr, Namikawa and Energy Partner do not teach the use of NiCrAlY and Al₂O₃ as the dielectric materials to be used in the coatings.

30. Pabla teaches that NiCrAlY and Al₂O₃ are well known for their dielectric properties and are especially desirable in dielectric coatings (paragraphs [0008], [0014], [0022], [0033], and tables III and IV).

31. At the time of the invention it would have been obvious to a person of ordinary skill in the art to use NiCrAlY and Al₂O₃ as the dielectric materials in the Carr and Namikawa references as taught by Pabla in order to use well known dielectric materials

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that would provide an electrically insulative coating that would be durable and easily attainable for manufacturing purposes.

32. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carr in view of Namikawa and Energy Partners as applied to claims 3, 9-18, 20, 22-37, 40-51, 53, 55-56 and 58-60 and further in view of Guthrie et al. U.S. Patent No. 4,786,086 hereinafter referred to as Guthrie et al.

33. Carr, Namikawa and Energy Partner do not disclose that the fuel cell stack assembly be enclosed in a vessel with a pipe extending through said vessel.

34. Guthrie et al. teaches that a fuel cell stack operated at high pressures must be contained in a pressure vessel (column 1, lines 20-22) and that pipes will penetrate the stack pressure vessel (column 3, lines 25-26).

35. At the time of the invention it would have been obvious to a person of ordinary skill in the art to enclose a high-pressure fuel cell stack within a pressure vessel. The motivation for doing so would have been first to maintain the fuel cell stack at the desired pressure for operation without the loss of gases from leaks between the cells due to the pressure differential between the stack and the atmosphere. As well as to contain the fuel cell stack for safety purposes if a component were to explode due to the high operating pressure.

Conclusion

36. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

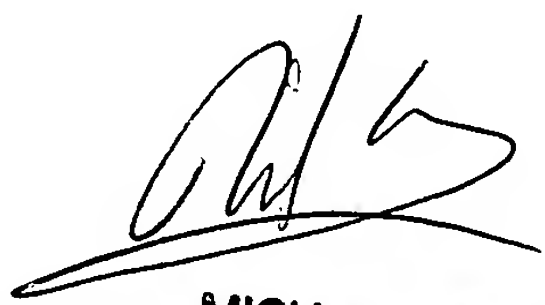
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Hodge whose telephone number is (571) 272-2097. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RWH 1-24-06



MICHAEL BARR
SUPERVISORY PATENT EXAMINER